

*Crotalaria* (*C. burhria*) which differs from anything previously described. The plant has a very long tap root, and when about a year old the axis becomes ribbed, the ribs beginning at the transition region between stem and root and extending in both directions. The ribbing is associated with the development of an accessory bundle system, and the gradual separation of branches which become established as separate plants. In this way, "when the main axis perishes, a circle of branches separated to below the ground level is already established." It was also observed that although the plant flowers during most of the year, it seems seldom to develop seeds.—J. M. C.

**Sexual evolution.**—SCHAFFNER<sup>37</sup> has presented his conception of the evolutionary stages of sexual expression, defining what may be called twenty-three steps in evolutionary progress, each one illustrated by examples. He is convinced that sex "cannot be associated primarily with special chromosomes." The general conclusion is reached that "the specific structures and functions developed in the ontogeny of an organism appear to be conditioned on the interaction of four fundamental influences: (1) hereditary factors, (2) influence of environment, (3) progression of senility, and (4) presence of sexual states in the living substance."—J. M. C.

**Mesozoic flora.**—BERRY'S<sup>38</sup> fourteenth contribution to the Mesozoic flora of the Atlantic coastal plain deals with the floras of the Eutaw and Ripley formations. The article comprises an advance paper of the fuller material to be described and illustrated in a professional paper of the United States Survey (no. 112) which has meanwhile appeared. The larger publication includes the Tuscaloosa formation besides the two groups mentioned.—A. C. NOÉ.

**North American flora.**—Part I of volume 6 begins the presentation of Phyllostictales by SEAVER. This ordinal name is used in place of Sphaeropsidales, because the generic name *Sphaeropsis* "goes out of the order," and the ordinal name becomes untenable. In this first part the genus *Phyllosticta* is presented, 300 species being recognized, only three of which are described as new.—J. M. C.

**Fossil woods of Queensland.**—SAHNI<sup>39</sup> describes and gives microphotographs of a number of fossil woods which range from fern stems through gymnosperms to angiosperms. The paper is a valuable contribution to the study of Mesozoic woods.—A. C. NOÉ.

<sup>37</sup> SCHAFFNER, J. H., Progression of sexual evolution in the plant kingdom. Ohio Jour. Sci. 22:101-113. 1922.

<sup>38</sup> BERRY, E. W., Contributions to the Mesozoic flora of the Atlantic coastal plain. XIV. Tennessee. Bull. Torr. Bot. Club 48:55-72. 1921.

<sup>39</sup> SAHNI, BIRBAL, Petrified plant remains from the Queensland Mesozoic and Tertiary formations. Queensland Geol. Survey. Publ. no. 267. pp. 48. pls. 5. figs 10. 1920.